STIC Search Report
EIC 3700

STIC Database Tracking Number: 221643

TO: Michael Astorino
Location: RND 7a39
Art Unit: 3736

Case Serial Number: 10/750299

From: Jeanne Horrigan
Location: RND 8A34
Phone: 571-272-3529

jeanne.horrigan@uspto.gov

Search Notes

Attached are the search results for the computerized diagnosis of audio/visual based learning disability. I tagged the references that seemed most relevant to me, but I recommend that you review all of the results

Also attached are a copy of your search request for your files and a search feedback form. Completing the form is voluntary. The completed forms help ensure that our services match your needs.

I hope the results are useful. Please feel free to contact me if you have any questions or want additional searching on this application.

JH

STIC Search Results Feedback Form

EIC 3700

Questions about the scope or the results of the search? Contact ***the EIC searcher or contact*:**

John Sims, EIC 3700 Team Leader
RND 8B35, Phone 2-3507

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 3730*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found**:*
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC3700 RND 8B31

RUSH

Access DB# 221643

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Michael Astorino Examiner #: 74902 Date: 4/11/07
Art Unit: 3736 Phone Number ~~30~~ x-24723 Serial Number: 10/750,299
Mail Box and Bldg/Room Location: RND - 7A39 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): Diane Dietrich (NJ) See attached

Earliest Priority Filing Date: _____

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Claim 18

RECEIVED
APR 11 2007

SPE 3736

****

STAFF USE ONLY **Type of Search** **Vendors and cost where applicable**

```
File   1:ERIC 1965-2007/Mar
         (c) format only 2007 Dialog
File   7:Social SciSearch(R) 1972-2007/Apr W3
         (c) 2007 The Thomson Corp
File  11:PsycINFO(R) 1887-2007/Apr W1
         (c) 2007 Amer. Psychological Assn.
File  35:Dissertation Abs Online 1861-2007/Mar
         (c) 2007 ProQuest Info&Learning
File 437:Education Abstracts 1983-2007/Mar
         (c) 2007 The HW Wilson Co
Set     Items   Description
S1       1111   AUDITORY AND DIAGNOS? AND LEARNING AND COMPUTER????
S2        499   AUDITORY(5N)DISCRIMINATION(5N)MEMORY
S3          5   S1 AND S2
S4          5   RD  (unique items)[1 duplicate; 4 not relevant]

File  47:Gale Group Magazine DB(TM) 1959-2007/Apr 13
         (c) 2007 The Gale group
File  88:Gale Group Business A.R.T.S. 1976-2007/Apr 19
         (c) 2007 The Gale Group
Set     Items   Description
S1       1279   AUDITORY AND DIAGNOS? AND LEARNING
S2     666736   COMPUTER OR COMPUTERI?ED
S3        583   S1 AND S2
S4         42   AUDITORY(5N)MEMORY(5N)DISCRIMINATION
S5          5   S3 AND S4
S6          5   RD  (unique items)[1 duplicate; 4 not relevant]

File  13:BAMP 2007/Apr W3
         (c) 2007  The Gale Group
File  15:ABI/Inform(R) 1971-2007/Apr 24
         (c) 2007 ProQuest Info&Learning
File  16:Gale Group PROMT(R) 1990-2007/Apr 23
         (c) 2007 The Gale Group
File  88:Gale Group Business A.R.T.S. 1976-2007/Apr 19
         (c) 2007 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2007/Apr 23
         (c)2007 The Gale Group
File 149:TGG Health&Wellness DB(SM) 1976-2007/Apr W3
         (c) 2007 The Gale Group
File 484:Periodical Abs Plustext 1986-2007/Apr W3
         (c) 2007 ProQuest
File 570:Gale Group MARS(R) 1984-2007/Apr 23
         (c) 2007 The Gale Group
File 727:Canadian Newspapers 1990-2007/Apr 24
         (c) 2007 Southam Inc.
File 734:Dayton Daily News Oct 1990- 2007/Apr 24
         (c) 2007 Dayton Daily News
File 755:New Zealand Newspapers 1995-2007/Apr 24
         (c) Fairfax New Zealand Ltd.
File 996:NewsRoom 2000-2001
         (c) 2007 Dialog
Set     Items   Description
S1         18   AUDITORY(3N)DISCRIMINATION(3N)MEMORY AND DIAGNOS? AND COMP-
              UTER
S2         12   RD  (unique items)
S3          0   S2/2002
```

S4 1 S2/2003
S5 2 S2/2004
S6 4 S2/2005
S7 0 S2/2006:2007
S8 5 S2 NOT S4:S6
S9 5 Sort S8/ALL/PD,A

9/3,AB,K/2 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

07515592 Supplier Number: 62790244
Electrophysiologic assessment of CAPD: A review of the basics.
Parthasarathy, Teralandur K.
The Hearing Journal, v53, n4, p52
April, 2000
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Professional
Word Count: 4425
... intervention strategies are considered good candidates for electrophysiologic assessment. In addition, confidence in the clinical **diagnosis** of CAPD is increased significantly when abnormal test results are shown across both electrophysiologic and...
...and transmitted to the brain is a series of tiny electrical potentials. By means of **computer** averaging, it is possible to extract the tiny electrical potentials. These electrical activities are complex...
...recorded by placing a tiny microphone within the ear canal. As a part of a **diagnostic** test battery, measurement of OAEs can provide valuable information about the integrity of the cochlea...
...muscle (innervated by the facial nerve) to high-intensity sounds. Again, as part of a **diagnostic** test battery, AR measurements can provide valuable information about the status of the middle ear...
...used to evaluate and confirm the normal cochlear function. This can be important in the **diagnosis** of central auditory nervous system (CANS) involvement because OAEs are normally absent in patients with...
...10)
ACOUSTIC REFLEX TESTING
The stapedial muscle acoustic reflex (AR) is one of the powerful **diagnostic** techniques available to audiologists. Acoustic reflex threshold and acoustic reflex decay tests have been useful...which the AR is measured. Presence or absence of the AR is one of the **diagnostic** measures, but latency and amplitude of the AR can also be used as an index...
...or tone pips, are used to generate a synchronous, brainstem neuroelectric response. By using the **computer** averaging method, a series of readable five major peaks is obtained, stored, and interpreted for... potential clinical utility with subjects in whom communication is compromised or difficult and for whom **auditory** **memory** and **discrimination** are in question.
The MMN waveform is derived by subtracting the evoked response waveform of...nature of the CANS. However, electrophysiologic measurement continues to be a powerful method in the **diagnosis** of audiologic and neurologic disorders.
The ABR is now well established as a valuable clinical...
...audiologic test battery. Each evaluation procedure has advantages and limitations, so the use of a **diagnostic** test battery approach is crucial in clearly defining the exact nature of CAPD and appropriate...
...ed.: Hearing Assessment. Austin, TX: Allyn & Bacon, 1991:247-319.
(13.) Jerger JF, Hayes D: **Diagnostic** applications of impedance

audiometry: Middle ear disorder, sensori-neural disorder. In Jerger JF, Northern JL...D, Reed N, et al.: Auditory middle latency responses in children: Effects of age and **diagnostic** category. Electroencephal Clin Neurophysiol 1985;62(5):343-351.

(28.) Kraus N, Ozdamar O, Hier...

9/3,AB,K/4 (Item 4 from file: 996)

DIALOG(R)File 996:NewsRoom 2000-2001
(c) 2007 Dialog. All rts. reserv.
0236023292 15ES0QRV

Relationship patterns between central auditory processing disorders and language disorders, learning disabilities, and sensory integration dysfunction

Kruger, Retha J
Communication Disorders Quarterly, v22, n2, p87
Saturday, March 31, 2001
JOURNAL CODE: AMFG LANGUAGE: ENGLISH RECORD TYPE: Fulltext
DOCUMENT TYPE: Scholarly Journal ISSN: 1525-7401
WORD COUNT: 6,743
TEXT:

...to occur together. The results suggest that a multimodal perceptual approach is useful for enhancing **diagnosis** of and choosing interventions for these children.

Problems related to central auditory processing disorders (CAPD...

...tend to look at these disorders from different perspectives. The present approach to the clinical **diagnosis** of and intervention for the co-occurrence of CAPD, language disorders, LD, and sensory integration...

...a need for a fundamental model that can integrate approaches and schools of thought in **diagnosis** and intervention with respect to children with these problems.

...Multimodal perceptual testing and the holistic integration of assessment results will enhance the integration of **diagnosis** and intervention in this area. This study proposes a method for establishing such a holistic approach to multimodal testing and **diagnosis** .

The rationale for this study is rooted in the need for a more cost-effective...

...of this study is to analyze overlapping patterns in the occurrence of problems identified during **diagnostic** assessment of a group of children in a school for remedial education in order to...

...peripheral hearing was also a criterion for inclusion because this is a prerequisite for the **diagnosis** of CAPD (ASHA, 1996; Cacace & McFarland, 1998; Jerger, Martin, & Jerger, 1987; Keith, 1984; McFarland & Cacace...

reports differed. The fact that the reports in the school files differed in method of **diagnosis** and presentation did not, however, pose a problem because the issue was to determine whether...

...areas selected in the area of speech language pathology were language reception, auditory closure, verbal expression, **auditory** analysis, **auditory memory** , **auditory discrimination** , **auditory** sequencing, and **auditory** blending (normal print in Figures 1 through 3). Problem areas selected in the area of...

...trees. The single inheritance phylogenetic analysis was performed using a phylogeny inference package (PHYLIP) of **computer** programs (Felsenstein, 1993). Parsimonious trees were extracted using the DOLLOP algorithm, and the consensus ...the sample group is shown in the "Total" column in Figure 3. The DOLLOP algorithm **computer** program found 48 trees. The CONSENSE algorithm **computer** program analysis yielded the consensus inheritance

tree as shown in Figures 3 and 4. In...commonly found in all of these disabilities.
This study proposes a multimodal approach for both **diagnosis** and intervention. Analysis of the results suggests that a holistic **diagnosis** and intervention approach-that is, a strong interdisciplinary or transdisciplinary team approachis one way to...
...intervention program that may be easily implemented with existing resources.
REFERENCES
American Psychiatric Association. (1994). **Diagnostic** and statistical manual of mental disorders (4th ed.). Washington, DC: Author.
American Speech-Language-Hearing...
...OH: Modern Curriculum.
Bellis, T. J., & Ferre, J. M. (1999). Multidimensional approach to the differential **diagnosis** of central auditory processing disorders in children. Journal of the American Academy of Audiology, 10...19, 379-392.
Chermak, G. D., Hall, W. J., III, & Musick, E E. (1999). Differential **diagnosis** and management of central auditory processing disorder and attention deficit hyperactivity disorder. Journal of the...
...Pines, MN: American Guidance Service.
Felsenstein, J. (1993). PHYLIP-Phylogeny inference package (Version 3.5c) '[**Computer** software]. Seattle: University of Washington, Department of Genetics.
Fisher, A. G., Sc Murray, E. A...
...NJ: Erlbaum.
McFarland, D. J., & Cacace, A. T. (1995). Modality specificity as a criterion for **diagnosing** central auditory processing disorders. American Journal of Audiology, 4(3), 36-48.
McSporran, E. (1997...Young, M. L. (1985). Central auditory processing through the looking glass: A critical look at **diagnosis** and management. Journal of Childhood Communication Disorders, 9, 31-42.
Retha J. Kruger, Johann J...
...pathology at the University of Pretoria with special intersts in central auditory processing disorders and **diagnostic** audiology. Address: Retha J. Kruger, Plot 7, Gouws Ave., Raslouw, Centurion, PO Box 52900, Wierda...

```
[File 1] ERIC 1965-2007/Mar
(c) format only 2007 Dialog. All rights reserved.
[File 121] Brit.Education Index 1976-2007/Q3
(c) 2007 British Education Index. All rights reserved.
[File 437] Education Abstracts 1983-2007/Mar
(c) 2007 The HW Wilson Co. All rights reserved.
[File 144] Pascal 1973-2007/Apr W3
(c) 2007 INIST/CNRS. All rights reserved.
[File 2] INSPEC 1898-2007/Apr W3
(c) 2007 Institution of Electrical Engineers. All rights reserved.
[File 6] NTIS 1964-2007/Apr W3
(c) 2007 NTIS, Intl Cpyrght All Rights Res. All rights reserved.
[File 7] Social SciSearch(R) 1972-2007/Apr W3
(c) 2007 The Thomson Corp. All rights reserved.
[File 11] PsycINFO(R) 1887-2007/Apr W1
(c) 2007 Amer. Psychological Assn. All rights reserved.
[File 35] Dissertation Abs Online 1861-2007/Mar
(c) 2007 ProQuest Info&Learning. All rights reserved.
[File 65] Inside Conferences 1993-2007/Apr 20
(c) 2007 BLDSC all rts. reserv. All rights reserved.
[File 142] Social Sciences Abstracts 1983-2007/Mar
(c) 2007 The HW Wilson Co. All rights reserved.
Set     Items   Description
S1       7603   S AUDITORY()DISCRIMINATION
S2       1781   S AUDITORY()MEMORY
S3      21893   S AUDITORY()(PROCESSING OR PERCEPTION)
S4      79006   S LEARNING()(DISORDER? ? OR DISABILIT? OR DISABL??)
S5    2403791   S COMPUTER OR COMPUTERS OR COMPUTERI?ED
S6    1576381   S ONLINE OR NETWORK??
S7    3108424   S DIAGNOS? OR ASSESS?
S8    4128900   S DETERMIN?
S9    2027499   S IDENTIFY??? OR IDENTIFIE? ? OR IDENTIFICATION
S10   7844535   S ANALYS? OR ANALYZ?
S11        42   S S1 AND S2 AND S4
S12        10   S S11 AND S5:S6
S13        10   RD  (unique items)
S14        10   SORT S13/ALL/PY,A
S15      1261   S S3 AND S4
S16       254   S S15 AND S5:S6
S17      4466   S S7(3N)S4
S18       545   S S8(3N)S4
S19      3278   S S9(3N)S4
S20      1587   S S10(3N)S4
S21        37   S S16 AND S17:S20
S22        37   S S21 NOT S12
S23        37   RD  (unique items)
S24        10   S S23/2002:2003
S25         9   S S23/2004:2005
S26         6   S S23/2006:2007
S27    783124   23
S28        25   S24:S26
S29        12   S S23 NOT S24:S26
S30        12   SORT S29/ALL/PY,A
S31        32   S S11 NOT (S12 OR S21)
S32         3   S S31/2002:2003
S33         1   S S31/2004:2005
S34         0   S S31/2006:2007
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S35 28 S S31 NOT S32:S33
S36 28 SORT S35/ALL/PY,A
S37 38 S S1 AND S2 AND S5:S6
S38 28 S S37 NOT (S12 OR S21 OR S11)
S39 27 RD (unique items)
S40 8 S S39/2002:2003
S41 10 S S39/2004:2005
S42 2 S S39/2006:2007
S43 7 S S39 NOT S40:S42
S44 7 SORT S43/ALL/PY,A

30/7/1 (Item 1 from file: 1)
ERIC

0006831008 **ERIC Number:** ED305784
Hill Top Spectrum, Volume 4, Nos. 1-4, September 1986-June 1987.
Hill Top Preparatory School, Rosemont, PA.
31 pp.
Hill Top Spectrum v4 n1-4 Sep-Jun 1986-87
June 1987 (19870600)
Language: English
Document Type: Collected Works - Serials
Record Type: Abstract
Record Status: New
Year Added: 1989
Journal Announcement: RIESEP1989
Target Audience: Teachers; Practitioners
The four issues contain articles on the **diagnosis** and treatment of **learning disabilities** (LDs). Article titles and authors include: "**Learning disability** Specialist Looks at Foreign Language Instruction" (Elissa Fisher); "Physician Questions Reliability of Central **Auditory processing** Tests in **Diagnosing** LD" (Daniel Schwartz); "Educator Urges Schools to **Identify**, Plan for Gifted/ **Learning disabled**" (Paul Daniels); "How One School District Programs for its Gifted/LD Population" (Ceil Frey); "Current Graduate Student Recounts Experiences as 'Special Student'" (Gary Dyer); "Educator Describes Transition Issues for **Learning disabled** Adolescents" (Sally Smith); "Timetable for Developmental Tasks Varies for LD, Non-Disabled Youths" (Moss Jackson); "Federal Policy and Funding Shifts Impact Transition Program Planning" (Gilbert Schiffman); "**Computers** and the **Learning disabled**" (Dianne Tobin and Linda McConville); "Graphical Capacity of **Computers** Assists in Teaching Mathematics" (John Busby); and "Educator Discusses Difficulties, Suggests Remediation Techniques in Using **Computers** with Disabled" (Nancy Bley). (JDD)

30/7/2 (Item 2 from file: 11)
PsycINFO(R)

0002619806 1999-05989-001
Auditory event-related potentials in the study of developmental language-related disorders
Author: Leppanen, Paavo Herman Tapio; Lyytinen, Heikki
Author Affiliation: U Jyvaskyla--Dept of Psychology--Jyvaskyla--Finland
Journal: Audiology & Neuro-Otology , Vol 2(5) , 308-340 , Sep-Oct , 1997
Book Publisher: Karger--Switzerland
Abstract: (Reviews recent **auditory** event related potential (ERP) studies of developmental language disorder (DLD) and dyslexia/reading disorder (RD). The possibility of using ERPs in searching for precursors of these disorders in the early development of infants at risk is also discussed. Differences in exogenous/sensory ERPs at the latency range of P1 and N1-P2 components have been reported between groups with DLD and RD and

control groups. Latency differences between the groups may be related to a common timing deficit. N1 amplitude group differences may be partly related to arousal/attentional factors and partly to the "tuning" of the **auditory** sensory system. Mismatch negativity deviations in DLD children seem to indicate differences in sensory memory functions. In both clinical groups the endogenous P3 amplitudes are lower and the latencies longer compared to those in controls. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

30/7/3 (Item 3 from file: 437)
Education Abstracts

Listen and learn? A software review of Earobics
Diehl, Sylvia Farnsworth
Language, Speech, and Hearing Services in Schools (Lang Speech Hear Serv Sch) v. 30 no1 (January 1999) p. 108-16
ISSN: 0161-1461
Abstract: The evaluation of software in the treatment of a language-**learning disability** requires **analysis** of both the technical and conceptual aspects of software development. The Earobics(r) program is reviewed with this dual purpose. The Earobics(r) program, as reported by the publisher, is an **auditory** development and phonics software program that is designed to provide **auditory processing** and phonemic awareness training. Considered first are the technical aspects of the program, including the program description, hardware requirements, and user friendliness. Next, the conceptual framework motivating the software development is **assess**ed through an **analysis** of the six games that make up the program. These six games appear to be premised on a combination of **auditory processing** and phonological awareness principles, which are not necessarily compatible. Finally, the strengths and limitations of the program are examined for the developmental sequence presented in its games and utility of the game sequence in the reading acquisition process. Reprinted by permission of the publisher.

30/7/5 (Item 5 from file: 11)
PsycINFO(R)

0003563695 2001-18728-007
Attention-deficit disorders with learning disorders in children and adolescents
Author: Tannock, Rosemary; Brown, Thomas E.
Author Affiliation: U Toronto--Toronto--ON--Canada
Book Source: Brown, Thomas E. (Ed) ; Attention-deficit disorders and comorbidities in children, adolescents, and adults.
, 231-295 , xxi , 671 , 2000
Book Publisher: American Psychiatric Publishing, Inc.--Washington--DC--US
Abstract: (chapter- The focus of this chapter is on attention deficit hyperactivity disorder (ADHD) and **learning disorders**, which are major problems of childhood that frequently co-occur and persist into adolescence and adulthood. Conservative estimates suggest that between 3% and 5% of children have ADHD and that approximately 1 in 4 of these children has specific **learning disabilities**. The authors first provide an update on the current conceptualizations of ADHD and **learning disorders**--disorders that may frequently co-occur at the same individual but that can be clearly distinguished from each other. In the remainder of the chapter, the authors examine the impact of concurrent **learning disorders** on the clinical presentation, correlates, course, **assess**ment, and clinical management of ADHD, with an emphasis on children and adolescents. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

30/7/6 (Item 6 from file: 11)

PsycINFO(R)

0003563594 2001-18639-000
The Wechsler Intelligence Scales and Gf-Gc theory: A contemporary approach to interpretation
Author: Flanagan, Dawn P.; McGrew, Kevin S.; Ortiz, Samuel O.
Author Affiliation: St John's U--Jamaica--NY--US
, xx , 424 , 2000
Book Publisher: Allyn & Bacon--Needham Heights--MA--US
Abstract: (preface- The overarching goal of this book is to modernize the interpretation of the Wechsler Intelligence Scales by applying Gf-Gc theory and the cross-battery approach to intellectual **assess**ment and interpretation. This book is organized into 3 sections. Part I discusses the Wechsler Intelligence Scales within historical and contemporary perspectives, provides an overview of intellectual **assess**ment, and evaluates literature on the validity of the Scales. Part II provides a comprehensive review of the psychometric, theoretical, and qualitative characteristics of the individual subtests of the WPPSI-R, WISC-III, WAIS-III, WMS-III, and CMS. Part III describes the product of grounding cognitive ability **assess**ment and interpretation with the Wechsler Scales in strong theory and research--the Wechsler-based Gf-Gc cross-battery approach. This book is intended for practitioners, researchers, and scholars who seek to infuse theory and research in their use and interpretation of the Wechsler Intelligence Scales. This text may also benefit practitioners, university trainers, students, researchers, and other professionals in school, clinical, counseling, and educational psychology, as well as neuropsychology, who use the Wechsler Intelligence and Memory Scales in applied settings.

30/7/7 (Item 7 from file: 11)
PsycINFO(R)

0003553925 2001-01236-000
A child's odyssey: Child and adolescent development (3rd ed.)
Author: Kaplan, Paul S.
Author Affiliation: Suffolk County Community Coll--Selden--NY--US
, xx , 648 , 2000
Book Publisher: Wadsworth/Thomson Learning--Belmont--CA--US
Abstract: (cover- Discusses the principles, theories, and latest research on child and adolescent development. A section entitled "Atypical Development" emphasizes such areas as eating disorders, stress, early intervention for infants and toddlers with disabilities, and children with **learning disabilities**, attention-deficit/hyperactivity disorder and mental retardation. Vygotsky's sociocultural theory and U. Bronfenbrenner's ecological theory as well as a section on new trends in child development are included. Information on the Genome Project, on twin and adoption studies, and on models of genetic/environmental interaction are presented, as well as material on technology and reproductive alternatives, on the father's role, and on the effects of cocaine. Material on neonate and infant sensory abilities, infant health, sudden infant death syndrome, dynamic systems theory of motor development, the needs of toddlers, modern views of Piaget's sensorimotor stage, culture and emotions, advances in attachment theory, the father-child relationship, and new research on day care are covered. Also explored are early childhood, middle childhood, health education, and adolescence.

30/7/12 (Item 12 from file: 11)
PsycINFO(R)

0004014505 2001-05782-000

Language impairment and psychopathology in infants, children, and adolescents
Series Title: Developmental clinical psychology and psychiatry, vol. 45.
Author: Cohen, Nancy J.
Author Affiliation: U Toronto--Toronto--ON--Canada
, xiii , 217 , 2001
Book Publisher: Sage Publications, Inc--Thousand Oaks--CA--US
Abstract: (cover- This book provides an authoritative account of the types and range of language and communications impairment, including how language and communication relate to neurological functioning, attachment patterns, emotional regulation, academic achievement, and cognitive development. From a clinical perspective, this book covers impairment definitions and terminology, conditions associated with language impairment, developmental processes affected by language, **assessment**, and treatment interventions. Throughout, case studies illustrate the contribution of language and communication impairments to transactions, adaptations, and maladaptations that can occur during development. Findings from the literature, including the author's own research program, highlight the consequences of having problems with language and communication on interactions with the family, with peers, in school, and in the clinic. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

36/7/5 (Item 5 from file: 1)
ERIC

0003489276 **ERIC Number:** ED085958
A Manual for Teachers of Learning disabled Children.
Berryman, Carolyn; Perry, Beverely
Corporate Source: Bristol City Board of Education, TN.
110 pp.
1974 (19740000)
Sponsoring Agency: Bureau of Elementary and Secondary Education (DHEW/OE), Washington, DC.Tennessee State Dept. of Education, Nashville.
Record Type: Abstract
Record Status: New
Year Added: 1974
Journal Announcement: RIEMAY1974
Presented are remedial activities for use by the classroom teacher with **learning disabled** elementary school children in her regular class. An introductory section discusses specific learning deficits, general motor coordination deficits, and behavior manifestations. **Offered are 15 generalizations about teaching the learning disabled child such as the importance of careful evaluation.** Provided for each of 50 remedial areas is a definition of the desired skill, an example of a related disability, and five to 25 remedial suggestions. Teaching suggestions are given for the following gross motor skills: rolling, running, jumping, skipping, throwing, balance, posture, body movement, rhythm and muscle strength. Activities for visual-motor fine muscle coordination and handwriting are given in the category of fine motor skills. Suggestions are also given for the following perceptual-motor skills: body image, position in space, spatial relationships, directionality, laterality, tactile discrimination, and manual expression. Also provided are teaching suggestions for the following visual skills: visual coordination and pursuit, visual reception (decoding), visual memory, visual sequencing, visual-figure ground differentiation, visual form discrimination, visual closure; and the following **auditory** skills: **auditory** reception (decoding), **auditory discrimination**, **auditory memory**, **auditory** sequencing, **auditory**-vocal association, and sound blending. Conceptualization skills are divided into the areas of general information, vocabulary, comprehension, classification, vocal fluency and encoding, letter recognition, spelling grammatic closure, and arithmetic processes. A final section on disorders of behavior offers remedial suggestions for distractibility and perservation. (DB)

36/7/6 (Item 6 from file: 1)
ERIC

0003793552 **ERIC Number:** ED112328
New Counselor Strategies--Implementing Learning disability Programs.
Klein, Rosalyn; Youngblood, Brenda
23 pp.
March 1975 (19750300)
Notes: Paper presented at the Annual Convention of the American Personnel and Guidance Association (31st, New York, New York, March 23-26, 1975)
Document Type: Speeches/Meeting Papers
Record Type: Abstract
Record Status: New
Year Added: 1976
Journal Announcement: RIEFEB1976
The authors offer remedial techniques which might help counselors to deal with children with **learning disabilities**. Ninety-five percent of children with **learning disabilities** suffer difficulties in the visual and **auditory** modalities. Children with visual problems may experience difficulties in visual discrimination, visual-motor coordination and visual memory. In the **auditory** modality, a child may suffer from difficulties in **auditory discrimination** and **auditory memory**. The authors describe several remedial techniques to treat each of the mentioned **learning disabilities**, adopting a team approach to the problem. Before a child is treated, an effort is made to **determine** the specific nature and degree of his impairment. The latter is accomplished by the administration of achievement, and other appropriate visual and **auditory** tests as well as by the completion of a questionnaire by the teacher describing the details of the problem. Afterwards, the teacher, the counselor, the reading specialist and other specialists consult together and prepare a detailed program for remedying the specific difficulty faced. The program is carried out in a special room called the "resource room." Periodically, similar consultations are held to **assess** the progress made and to plan new approaches, if necessary. (Author/SE)

36/7/11 (Item 11 from file: 11)
PsycINFO(R)

0001132342 1979-28859-001
Cognitive deficits, learning disabilities, and WISC Verbal-Performance consistency
Author: Cohen, Ronald L.; Netley, Charles
Author Affiliation: York U, Glendon Coll, Toronto, Canada
Journal: Developmental Psychology , Vol 14(6) , 624-634 , Nov , 1978
Book Publisher: American Psychological Assn--US
Abstract: (Three experiments compared 52 10-11 yr olds with specific **learning disabilities** (LDs) with controls on several tests of information processing and memory. Results show that (a) LD children with a balanced WISC Verbal-Performance IQ showed some deficit in the semantic processing of **auditory** verbal material; this deficit was not shown by LDs having a Performance IQ at least 15 points higher than their Verbal IQ; (b) increasing rate of presentation in information processing tasks did not affect the LDs more than the controls; (c) although the LDs showed little or no deficit in **auditory** digit span, they showed large deficits in short-term memory (STM) tasks involving supraspan **auditory** messages. A possible causal relationship between the STM deficits and academic disabilities is discussed in terms of an inability of the STM maintenance system to deal with overload. (24 ref) (PsycINFO Database Record (c) 2006 APA, all rights reserved)
Digital Object Identifier: http://dx.doi.org/10.1037/0012-1649.14.6

36/7/12 (Item 12 from file: 11)
PsycINFO(R)

0001156680 1980-26890-001
A test battery to assess intrasensory and intersensory development of young children
Author: Temple, Ina G.; Williams, Harriet G.; Batemen, N. Jean
Author Affiliation: Bowling Green State U
Journal: Perceptual and Motor Skills , Vol 48(2) , 643-659 , Apr , 1979
Book Publisher: Perceptual & Motor Skills--US
Abstract: (A battery of 15 tests (4 visual, 4 **auditory**, 4 tactile-kinesthetic, and 3 intersensory) was administered to 109 normally developing 6- and 8-yr-old and 32 slowly developing or **learning disabled** children. The effects of age or developmental level on test performance were established. Based on the interdependence of the tests, reliability estimates, and the capacity of the tests to discriminate among groups classified according to age or developmental level, a battery of 10 intra- and intersensory tests is proposed. The battery has 3 tests of visual perception (visual memory, dynamic depth perception, and size discrimination), 3 tests of **auditory perception** (**auditory discrimination**, **auditory memory** of related syllables, and **auditory** sequential memory of numbers), 2 tests of tactile-kinesthetic perception (tactile integration and movement awareness), and 2 tests of intersensory integration (**auditory**-tactile integration and **auditory**-visual integration). (29 ref)

36/7/18 (Item 18 from file: 35)
Dissertation Abs **Online**

1045466 ORDER NO: AAD89-03823
ANALYSIS OF TESTS FREQUENTLY UTILIZED IN DETECTING CENTRAL AUDITORY PROCESSING DEFICITS IN LEARNING DISABLED CHILDREN
Author: MARTIN, STEPHANIE TARRANT
Degree: PH.D.
Year: 1988
Corporate Source/Institution: UNIVERSITY OF OREGON (0171)
Source: Volume 4912B of Dissertations Abstracts International.
PAGE 5211 . 143 PAGES
The purpose of this study was to **identify** a combination of tests/subtests designed to **assess auditory processing** abilities which would reliably differentiate between performance of 30 children **diagnosed** as **learning disabled** in reading, spelling, listening and/or language, and 30 normally achieving children. Standardized testing procedures were utilized for administration of the following 16 tests/subtests: the two subtests from the Flowers-Costello Test of Central **Auditory** Abilities (Low Pass Filtered Speech and Competing Messages); six subtests from the Goldman-Fristoe-Woodcock **Auditory** Skills Battery (Sound Mimicry, Sound Recognition, Sound **Analysis**, Sound Blending, **Auditory discrimination** in Quiet and **Auditory memory**); the **Auditory** Closure Subtest from the Illinois Test of Psycholinguistic Abilities; the Lindamood **Auditory** Conceptualization Test; the three subtests from the SCAN: Screening Test for **Auditory processing** Disorders (filtered words, **auditory**-figure ground and competing messages); the Staggared Spondaic Word Test; the Token Test for Children; and the Wepman **Auditory discrimination** Test.
Descriptive, correlational, inferential and discriminative statistical procedures were utilized to **analyze** the data. Chi square **analyses** and t-tests of the difference between means of the performance on each experimental test of two groups of subjects demonstrated significant differences on the majority of the variables. Pearson Product-Moment resulted in positive correlations between several of the tests. A Discriminative Function **Analysis** resulted in a tentative battery of 10 subtests which were most likely to differentiate the **learning disabled** children from their normally achieving peers.

The results of testing were discussed in relation to the tasks involved in each of the experimental tests. Test battery strengths and potential problems inherent in the use of this battery were also described. Finally, general response patterns of the subjects and implications of the results of **diagnosis** and intervention with **learning disabled** children having **auditory processing** deficits were presented.

36/7/19 (Item 19 from file: 35)
Dissertation Abs **Online**

01091608 ORDER NO: AAD90-07144
A STUDY OF THE DISCRIMINATIVE FUNCTION OF SIX VARIABLES IN 9-12-YEAR-OLD MALES WITH LEARNING DISABILITIES (NINE-YEAR-OLD, TWELVE-YEAR-OLD)
Author: HANIG, KENNETH MATTHEW
Degree: PH.D.
Year: 1989
Corporate Source/Institution: ANDREWS UNIVERSITY (0443)
CHAIR: WILFRED FUTCHER
Source: Volume 5010A of Dissertations Abstracts International.
PAGE 3186 . 200 PAGES

Problem. Greater discriminative power to clarify the **diagnostic** category of **learning disabilities** is needed. Research **identifies** many types of **learning disabled** populations. Studies do not indicate that the six variables used in this project had been combined and used in a project prior to this. Using measures such as Sentence Repeat, Synonyms, Digits Forward/Backwards, Design Copy, Nonsense Words, and Visual Pattern Matching, this project studied the responses of an LD sample to these subtests and their ability to discriminate among a verbally impaired sample, a spatially impaired sample, and a control group.

Method. Six subtests were developed, which, according to the literature, measured **auditory discrimination and memory** (Sentence Repeat); **auditory** and verbal comprehension and general verbal background (Synonyms); immediate **auditory memory**, attention, concentration, double tracking, and reversal of mental operations (Digits Forward/Backwards); visual perceptual-motor functioning (Design Copy); lexical processing (Nonsense Words); and visual memory and visual-perceptual learning (Visual Pattern Matching). The basic null hypothesis was that there is no linear combination of six variables which significantly discriminates among the three groups. The instrument was subjected to a pilot study before the final data collection took place. The data were **analyzed** using one-way **analysis** of variance, multivariate **analysis** of variance, and discriminant function **analysis**.

Results. Two subtests dominated in their ability to discriminate among the groups--Synonyms and Digits Forward/Backwards. Both the verbal and spatial groups were found to have shared deficits, but differed significantly from the control group on most of the measures. The null hypothesis was rejected.

Conclusion. The 9-12-year-old males in this sample with **learning disabilities** expressed deficits only in verbally related areas--specifically **auditory**/verbal comprehension and short-term **auditory memory**, attention, and concentration. Based on the literature and data gathering experience, it was also revealed that students should not be placed in LD programs based on one test, and a home visit should take place.

36/7/20 (Item 20 from file: 1)
ERIC

0007468231 **ERIC Number:** EJ420075
An Analysis of WISC-R Factors for Gifted Students with Learning disabilities.
Waldron, Karen A.; Saphire, Diane G.
Journal of **Learning disabilities** v23 n8 p491-98 Oct 1990
1990 (19900000)

ISSN: 0022-2194
Language: English
Document Type: Journal Articles; Reports - Research
Record Type: Abstract
Record Status: New
Year Added: 1991
Journal Announcement: CIJMAY1991
Target Audience: Practitioners
Twenty-four gifted children with **learning disabilities** and a control group of nondisabled gifted children were administered the Wechsler Intelligence Scale for Children-Revised. The 8- to 12-year-old subjects were found to be more reliant on verbal conceptualization and reasoning than controls and demonstrated deficiencies in short-term **auditory memory** and sound discrimination. (Author/JDD)

36/7/23 (Item 23 from file: 1)
ERIC

0009713340 **ERIC Number:** ED441314
The Central Auditory processing Kit[TM]. Book 1: Auditory memory [and] Book 2: Auditory discrimination, Auditory Closure, and Auditory Synthesis [and] Book 3: Auditory Figure-Ground, Auditory Cohesion, Auditory Binaural Integration, and Compensatory Strategies.
Mokhemar, Mary Ann
548 pp.
1999 (19990000)
ISBN: 0-7606-0304-9; 0-7606-0305-7; 0-7606-0306-5
Available From: LinguiSystems, Inc., 3100 4th Ave., East Moline, IL 61244-9700 ($98.85). Tel: 800-776-4332 (Toll Free); Tel: 800-933-8831 (TDD); e-mail: service@linguisystems.com; Web site: http://www.linguisystems.com.
Language: English
Document Type: Books; Guides - Non-Classroom
Record Type: Abstract
Record Status: New
Year Added: 2000
Journal Announcement: RIENOV2000
This kit for **assessing** central **auditory processing** disorders (CAPD), in children in grades 1 through 8 includes 3 books, 14 full-color cards with picture scenes, and a card depicting a phone key pad, all contained in a sturdy carrying case. The units in each of the three books correspond with **auditory** skill areas most commonly addressed in intervention for children with CAPD and provide specific training exercises to improve each of these skill areas. Book 1 begins by listing certain behaviors that are often associated with children presenting with CAPD, including poor **auditory** functioning, weaknesses in receptive and expressive language, and behavior problems. **Instruments for assessing and diagnosing CAPD are listed.** Book 1 then focuses on **auditory memory** skills, such as visual- **auditory memory** and **auditory**-sequential memory. Book 2 addresses **auditory discrimination**, **auditory** closure, and **auditory** synthesis. The final book provides **assessment** and training exercises for developing skills in the areas of **auditory** figure-ground (listening in the presence of background noise from sources such as air conditioning units, noisy classrooms, radios, TVs, cafeterias, and playgrounds), **auditory** cohesion, **auditory** binaural integration, and compensatory strategies and environmental management. Sample case studies are provided in the three books. (Each book contains references.) (CR)

36/7/24 (Item 24 from file: 11)
PsycINFO(R)

0002706882 1999-05027-010
Children's performance on pseudoword repetition depends on auditory trace quality: Evidence from event-related potentials
Author: Ceponiene, Rita; Service, Elisabet; Kurjenluoma, Sanna; Cheour, Marie; Naatanen, Risto
Author Affiliation: U Helsinki--Dept of Psychology, Cognitive Brain Research Unit--Helsinki-- Finland
Journal: Developmental Psychology , Vol 35(3) , 709-720 , May , 1999
Book Publisher: American Psychological Assn--US
Abstract: (journal abstract- This study explored the relation between phonological short-term memory and **auditory**-sensory processing in 7-9-year-old children. Twenty-four participants performed a pseudoword repetition test. The mismatch-negativity (MMN) component of **auditory** event-related brain potentials was obtained from 9 participants with the highest and 9 participants with the lowest scores on the test. The MMN indexes short-term **auditory**-sensory memory, including **auditory**-sensory representations for speech. It was recorded to just perceptible /baga/-/baka/ bisyllabic and easily discriminable 1000/1100-Hz tone contrasts with interstimulus intervals of 350 and 2,000 ms. The high and low repeaters differed significantly in MMN amplitude to speech stimuli at the shorter interstimulus interval. Thus, the accuracy of **auditory**-sensory processing seems to affect phonological short-term representations in school-age children and therefore may play a role in vocabulary development. (PsycINFO Database Record (c) 2006 APA, all rights reserved)
Digital Object Identifier: http://dx.doi.org/10.1037/0012-1649.35.3

44/7/1 (Item 1 from file: 11)
PsycINFO(R)

0002601385 1997-43187-011
The role of absolute and relative amounts of time in forgetting within immediate memory: The case of tone-pitch comparisons
Author: Cowan, Nelson; Saults, J. Scott; Nugent, Lara D.
Author Affiliation: U Missouri--Dept of Psychology--Columbia--MO--US
Journal: Psychonomic Bulletin & Review , Vol 4(3) , 393-397 , Sep , 1997
Book Publisher: Psychonomic Society--US
Abstract: (Reassesses **auditory memory** loss in light of a recent theoretical debate about the nature of forgetting in immediate memory. Many investigators of **auditory** sensory memory have assumed that memory loss during a retention interval (RI) of some seconds results from a process (such as decay) that depends on the absolute amount of time that has elapsed since presentation of the sound. An alternative possibility, brought to light by studies on immediate verbal memory, is that it is the relative, rather than the absolute, amount of time that matters. The authors examine these factors in a tone-comparison study by varying not only the RI between 2 tones to be compared, but also the interpair interval (IPI). 28 Ss learned tones sounds and were asked to use the arrow keys on the **computer** to label each tone pair according to whether the 2nd tone was higher or lower in pitch than the first. A change in background color of the screen occurred before the 1st tone was presented. The findings suggest that there is an effect of absolute time between tones, even with the ratio between the IPI and RI held constant. In addition, there was an effect of temporal distinctiveness. Several concepts of decay are considered in relation to the results. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

44/7/7 (Item 7 from file: 7)
Social SciSearch(R)

03657252 **Genuine Article#:** 465WZ **Number of References:** 31
Title: Backward and simultaneous masking measured in children with Language-Learning

Impairments who received intervention with Fast ForWord or Laureate Learning Systems software

Author(s): Marler JA (REPRINT); Champlin CA; Gillam RB
Corporate Source: Michigan State Univ,Dept Audiol & Speech Sci,378 Commun Arts & Sci Bldg/E Lansing//MI/48824 (REPRINT); Univ Texas,Austin//TX/78712

Journal: AMERICAN JOURNAL OF SPEECH-LANGUAGE PATHOLOGY , 2001 , V 10 , N3 (AUG) , P 258-268
Publisher: AMER SPEECH-LANGUAGE-HEARING ASSOC , 10801 ROCKVILLE PIKE, ROCKVILLE, MD 20852-3279 USA
Language: English **Document Type:** Article

Abstract: The developers of a **computer**-assisted language intervention program called Fast ForWord (FFW) have claimed that their software changes temporal processing abilities as a result of specialized modifications to the acoustic and temporal properties of the speech signal within the program. This pilot study compared changes in **auditory** temporal processing in children who received FFW training and in children who received training with **computer**-assisted language intervention programs that were not designed to improve **auditory** perceptual skills. Four boys with Language-Learning Impairments (LLI) and 3 boys with typical language participated. Two of the boys with LLI received the FFW program, and the other 2 received a bundle of **computer**-assisted instruction (CAI) programs published by Laureate Language Systems (LLS). The FFW and LLS programs were presented on the same schedule.

To **assess** temporal processing, signal thresholds in backward and simultaneous masking conditions were evaluated just before, during, and immediately after language training. The boys with typically developing language received no training. Children with typical language produced signal thresholds in the backward masking condition that were markedly lower than those in the simultaneous masking condition. This disparity is indicative of normal temporal processing. Conversely, 3 of 4 children with LLI failed to demonstrate a simultaneous-backward difference during baseline. The lack of a difference implies that temporal processing was not normal in these children. The fourth child with LLI had signal thresholds that paralleled those of the children with normal language development. This child also had the mildest form of LLI.

Of the 3 children whose temporal processing was abnormal, 2 boys showed decreased signal thresholds in the backward masking condition. However, the improvement was sudden, occurring relatively early in the training sequence, and observed with both treatment programs. The third child with abnormal temporal processing failed to show a change in backward masking at any time during treatment. Over the course of the experiment, signal thresholds for all listeners decreased by similar amounts in both backward and simultaneous masking. Taken together, these results do not support the presence of a program-specific improvement in temporal processing. In addition to the temporal processing deficits revealed by backward masking, group differences in response patterns implicate **auditory memory** involvement or differences in maintaining attention.

[File 9] **Business & Industry(R)** Jul/1994-2007/Apr 23

[File 15] **ABI/Inform(R)** 1971-2007/Apr 24

[File 88] **Gale Group Business A.R.T.S.** 1976-2007/Apr 19

[File 148] **Gale Group Trade & Industry DB** 1976-2007/Apr 23

[File 149] **TGG Health&Wellness DB(SM)** 1976-2007/Apr W3

[File 441] **ESPICOM Pharm&Med DEVICE NEWS** 2007/Oct W3

[File 135] **NewsRx Weekly Reports** 1995-2007/Apr W3

[File 47] **Gale Group Magazine DB(TM)** 1959-2007/Apr 13

[File 275] **Gale Group Computer DB(TM)** 1983-2007/Apr 23

[File 674] **Computer News Fulltext** 1989-2006/Sep W1

[File 647] **CMP Computer Fulltext** 1988-2007/Jul W1

[File 636] **Gale Group Newsletter DB(TM)** 1987-2007/Apr 23

Set	Items	Description
S1	285	S AUDITORY()DISCRIMINATION
S2	308	S AUDITORY()MEMORY
S3	2685	S AUDITORY()(PROCESSING OR PERCEPTION)
S4	19954	S LEARNING()(DISORDER? ? OR DISABILIT? OR DISABL??)
S5	5766113	S COMPUTER OR COMPUTERS OR COMPUTERI?ED
S6	6518660	S ONLINE OR NETWORK??
S7	0	S S1(S)S2(S)S4
S8	140	S S3(S)S4
S9	4	S S8(S)S5
S10	1	S S8(S)S6
S11	5	S S9:S10
S12	**4**	**RD (unique items)[not relevant]**
S13	37	S S1:S2(S)S3
S14	0	S S13(S)S5
S15	0	S S13(S)S6
S16	7	S S1(S)S2
S17	6	RD (unique items)
S18	**6**	**SORT S17/ALL/PD,A**

18/3,AB,K/2 (Item 2 from file: 88)
Gale Group Business A.R.T.S.

05305010 **Supplier Number:** 58562902
Bringing Theory to Practice.(Review) (book reviews)
McArthur, Genevieve; Hogben, John
American Journal of Psychology , 112 , 4 , 654
Winter , 1999
Document Type: Review
ISSN: 0002-9556
Language: English **Record Type:** Fulltext
Word Count: 2383 **Line Count:** 00198
...the Rapid Perception Test. The parameters of this test suggest that

performance may rely on **auditory discrimination** (Deary, 1989; Massaro & Burke, 1991), **auditory memory** (Reed, 1989; De Weirdt, 1988), temporal sequencing ability (the ability to recognize the order of...

18/3,AB,K/3 (Item 3 from file: 88)
Gale Group Business A.R.T.S.

07700832 **Supplier Number:** 67184117
AUDITORY AND VISUAL PERCEPTION PROCESSES AND READING ABILITY: A QUANTITATIVE RE**ANALYS**IS AND HISTORICAL REINTERPRETATION. (Statistical Data Included)
Kavale, Kenneth A.; Forness, Steven R.
Learning disability Quarterly , 23 , 4 , 253
Fall , 2000
Document Type: Statistical Data Included
ISSN: 0731-9487
Language: English **Record Type:** Fulltext
Word Count: 11077 **Line Count:** 01088
...visual perceptual skills among the 267 studies.
For **auditory perception**, four skills were distinguished: (a) **auditory discrimination** (AD): ability to differentiate among auditorially presented stimuli; (b) **auditory memory** (AM): ability to recall a sequence of auditorially presented stimuli; (c) **auditory** blending (AB): ability...
...found for **auditory** blending (AB), which amounted to the same percent increase (38%) found for **auditory discrimination** (AD) and **auditory memory** (AM). These findings suggest little difference in predictive accuracy among **auditory** perceptual skills.
Visual perceptual...

```
File   2:INSPEC 1898-2007/Apr W3
         (c) 2007 Institution of Electrical Engineers
File   5:Biosis Previews(R) 1926-2007/Apr W3
         (c) 2007 The Thomson Corporation
File   7:Social SciSearch(R) 1972-2007/Apr W3
         (c) 2007 The Thomson Corp
File   8:Ei Compendex(R) 1884-2007/Apr W3
         (c) 2007 Elsevier Eng.  Info. Inc.
File  11:PsycINFO(R) 1887-2007/Apr W1
         (c) 2007 Amer. Psychological Assn.
File  34:SciSearch(R) Cited Ref Sci 1990-2007/Apr W3
         (c) 2007 The Thomson Corp
File  45:EMCare 2007/Apr W3
         (c) 2007 Elsevier B.V.
File  57:Electronics & Communications Abstracts 1966-2007/Apr
         (c) 2007 CSA.
File  73:EMBASE 1974-2007/Apr 23
         (c) 2007 Elsevier B.V.
File 144:Pascal 1973-2007/Apr W3
         (c) 2007 INIST/CNRS
File 155:MEDLINE(R) 1950-2007/Apr 23
         (c) format only 2007 Dialog
File 156:ToxFile 1965-2007/Apr W4
         (c) format only 2007 Dialog
File 162:Global Health 1983-2007/Mar
         (c) 2007 CAB International
File 440:Current Contents Search(R) 1990-2007/Apr 25
         (c) 2007 The Thomson Corp
Set     Items   Description
S1         56   (APD OR CAPD)(S)AUDITORY NOT (AUDITORY()PROCESSING OR (AUD-
               ITORY()MEMORY AND AUDITORY()DISCRIMINATION))
S2         17   RD  (unique items)
S3          0   S2/2002
S4          0   S2/2003
S5          2   S2/2004
S6          1   S2/2005
S7          2   S2/2006
S8          0   S2/2007
S9         12   S2 NOT S3:S7
S10        12   Sort S9/ALL/PY,A [not relevant

File  88:Gale Group Business A.R.T.S. 1976-2007/Apr 20
         (c) 2007 The Gale Group
File 149:TGG Health&Wellness DB(SM) 1976-2007/Apr W3
         (c) 2007 The Gale Group
File 484:Periodical Abs Plustext 1986-2007/Apr W3
         (c) 2007 ProQuest
File 641:Rocky Mountain News Jun 1989-2007/Apr 24
         (c) 2007 Scripps Howard News
Set     Items   Description
S1          4   (APD OR CAPD)(S)AUDITORY NOT (AUDITORY()PROCESSING OR (AUD-
               ITORY()MEMORY AND AUDITORY()DISCRIMINATION))
S2          3   RD  (unique items)

 2/7/3     (Item 1 from file: 641)
DIALOG(R)File 641:Rocky Mountain News
(c) 2007 Scripps Howard News. All rts. reserv.
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05044352
COMPUTERS SCULPT A NEW SCIENCE MODELS: FROM BRAINS TO GALAXY'S FORMATION
ROCKY MOUNTAIN NEWS (RM) - SUNDAY DECEMBER 24, 1989
By: JOSEPH B. VERRENGIA ROCKY MOUNTAIN NEWS SCIENCE WRITER
Edition: FINAL Section: LOCAL Page: 26
Word Count: 737
TEXT:
Joan Burleigh's brain-in-a-box sounds like a Christmas gag gift, but the Colorado State University researcher is using the remarkable computer simulation to learn why millions of children can hear but not understand.

Perhaps 5% of the nation's children are afflicted with **Central Auditory Perception Disorder**, or **CAPD** . They often have normal hearing, but the message in sounds gets uselessly scrambled in their brains, especially in noisy, competitive environments.

That's why 38% of children with **CAPD** have failed at least one grade in school. Sometimes they outgrow the disorder as their brains mature. But most remain easily distracted and labeled for life as stupid or stubborn.

Diagnosing CAPD once meant subjecting children to long verbal tests in which doctors would pour sentences into the kids' ears and expecting them to find and repeat a particular phrase amid the din.

Now a computer model does the job automatically. A child wears special electronic headgear connecting the brain to the computer. While the child struggles to focus attention on the key phrase, **the computer measures brain-wave activity and compares it with a model of normal human brain functions. After the test, the computer draws a color diagram outlining the difference between the subject's processing of sounds and normal perception.** Less activity means diminished capacity to process sounds.

"The model enables us to look the brain in a new, more objective perspective," says Burleigh. "We can see what the brain is doing when the stimulus is received."

During the 1980s, computer models have increasingly liberated science from the often tedious process of conducting experiments and recording observations.

Models enable scientists to re-create worlds like the human brain that are too large, complex, fast-moving or remote to examine by conventional means.

Those worlds are simulated in the computer by thousands of mathematical equations. Solutions to the equations represent a new class of scientific evidence: "facts" determined by the computer.

Engineers use them to test the stability of the proposed space station during a solar flare. Computers help chemists "see" molecules and combine them to create unique materials. A political scientist at the University of Colorado is even making a model to predict when peace will turn into war.

As the popularity of models increases, so do objections that a claim cannot be considered proven when its evidence exists only in a bundle of wires and circuits. Accordingly, most modelers treat their results cautiously.

"We only know how a fraction of the brain works," Burleigh says. "We only use the model for research, not diagnosis."

Here's a sampler of significant scientific models operating today:

Climate forecasts: Dire forecasts of the greenhouse effect come from a handful of the world's most complex - and controversial - computer models, including one at the National Center for Atmospheric Research in Boulder.

Climate models divide the world into a grid of Colorado-sized boxes. Years of temperatures, precipitation and other atmospheric measurements from areas within the boxes are boiled down into single numbers - a necessary simplification because running these models requires hundreds of

hours, even on a supercomputer.

Distortions inevitably occur. Japan and other nations are lost in the shuffle. Hudson Bay and the Mediterranean show up as lakes.

More serious is the exclusion of enormous but poorly understood natural forces such as ocean mixing and cloud behavior.

Better climate data is being added to the models, leading to refined - and more conservative - global warming estimates by NCAR and others.

Space: Columbia University and IBM researchers use a model to demonstrate how a galaxy evolves.

It's a two-dimensional grid of 100 rows of 100 boxes. The grid represents a cosmic wedge that is 1,000 light-years wide.

That's a big neighborhood, and several cosmic forces must be represented: the birth and death of billions of stars, the ebb and flow of interstellar dust, stellar wind, heating, cooling, physical laws.

The model is so vast that it requires an experimental supercomputer that combines 576 processors - each of which is equal to the original supercomputer, the CRAY-1.

Early results are mesmerizing: Strands of red, orange and yellow matter float amid billions of blue stars. Bubbles bloat and burst. Supernova explosions collapse into black holes. But the model has yet to define how that all happens.

CAPTION:

PHOTO

Computer models like these used in climate modeling at NCAR in Boulder have increasingly liberated scientists from tedious experimentation and observation. By National Center for Atmospheric Research

United States Patent **5,692,906**
Corder **December 2, 1997**

Method of diagnosing and remediating a deficiency in communications skills

Abstract

A method of identifying strengths and weaknesses in a student's ability to use their sensory channels which integrates five basic processes into a series of testing procedures. First, the nature of the test is specified, either by a teacher or by a pre-programmed default stored in the memory of a computer. Second, test material suitable for use with a test of the specified nature is identified and extracted from the memory of the computer and then presented to the student using the outputs of the computer. The responses of the student through the inputs of the computer are then recorded and analyzed for patterns which are capable of being correlated with deficiencies in the sensory channels under test. Finally, procedures are recommended for remediating the deficiencies identified by analysis of the performance data.

Inventors: **Corder; Paul R.** (Baytown, TX)
Appl. No.: **08/484,534**
Filed: **June 7, 1995**

Related U.S. Patent Documents

Application Number	Filing Date	Patent Number	Issue Date
385032	Feb., 1995		
192497	Feb., 1994	5387104	
863687	Apr., 1992	5302132	

Current U.S. Class: **434/156** ; 434/118; 434/169; 434/307R; 434/350; 704/238; 705/45; 706/927

Current International Class: G09B 7/04 (20060101); G09B 7/00 (20060101); G09B 5/00 (20060101); G09B 19/04 (20060101); G09B 5/14 (20060101); G09B 21/00 (20060101); G09B 019/00 ()

EXAMPLE 1

In this embodiment of the method of the present invention, the target objective to be achieved is the diagnosis and remediation of a student's ability to discriminate among various environmental sounds. The learning channel to be tested is that of hearing 700.

The computer components utilized are the central processing unit, display screen, keyboard, mouse (or other cursor control device), speaker/sound synthesizer (or other sound output device such as seen for student 14 in FIG. 2c), memory (temporary and/or permanent), sound digitizer (or other sound input device such as a CD-ROM device 244 containing a disk upon which these environmental sounds and other test materials are stored), microphone (or other audio recording device) and the processing means.

Test specification and the performance of the student are documented and used in subsequent testing sessions using the EVALUATE module 400. The teacher can alternatively select an appropriate starting point for the test or the communication skills focus to be tested is selected based on the previous performance of the student. These basic processes are illustrated in this example.

A. How the Teacher Specifies the Diagnostic Test

The process followed by the teacher to conduct a diagnostic test of the auditory discrimination and auditory memory aspects of the auditory channel of learning is depicted in the logic diagrams of FIGS. 4, 5, 6a and 7a. The teacher selects the diagnostic focus of the auditory test or accepts the defaulted focus suggested as a result of previous performance by the student. These focuses include, but are not limited to, the following:

discriminating among various environmental sounds,

discriminating among different sounds of letters and words,

identifying simple everyday sounds,

recognizing rhyming words,

following simple one and two step directions,

identifying sounds in words,

reproducing simple sounds, letters, and words,

identifying beginning sounds in words,

identifying ending sounds in words,

identifying medial sounds in words,

using rhyming words to complete sentences,

identifying syllables in words, and

similar focuses.

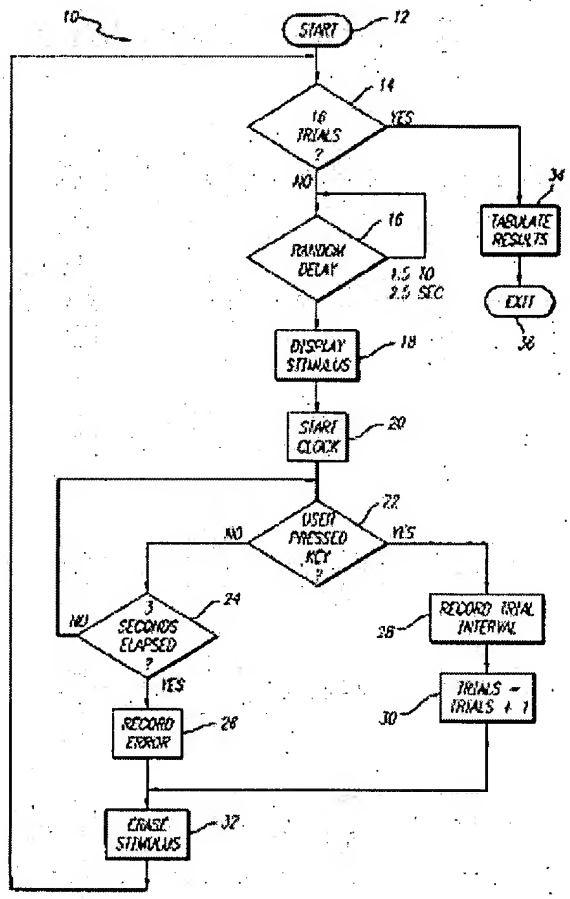
Interactive computer program for measuring and analyzing mental ability

Publication number: US5911581
Publication date: 1999-06-15
Inventor: REYNOLDS JOSH (US); KNIGHT JEREMY (US)
Applicant: BRAINTAINMENT RESOURCES INC (US)
Classification:
- International: ***G09B5/06; G09B7/04;*** *A61B5/16;* **G09B5/00; G09B7/00;** A61B5/16; (IPC1-7): G09B19/00
- European: G09B5/06C; G09B7/04
Application number: US19970806500 19970227
Priority number(s): US19970806500 19970227; US19950391352 19950221

Report a data error here

Abstract of **US5911581**

An interactive automatic system and technique for measuring and training of mental ability. In the illustrative embodiment, the invention is implemented on a computer which automatically presents a variety of visual and auditory stimuli. The system then measures reaction to the stimuli, adjusts certain stimulus parameters, and provides scores in response thereto. The scores are tabulated and displayed for analysis. In particular embodiments, the invention tests for physical reaction time, perceptual awareness thresholds, attention level, speed, efficiency and capacity of information processing by the brain and elementary cognitive processes, including memory, memory access and decision-making speed. The invention measures, identifies and quantifies noise in the subject's brain and elementary cognitive processing system, and the information exchange rate between the subject's left and right brain hemispheres. The inventive system compiles a history of the test scores, renders an overall performance rating, and delivers comments based on the subject scores. The complexity of the tests are adjusted based on the scores to optimally challenge cognitive capacities, thereby rendering more accurate evaluations of cognitive capacity, and optimizing learning of desired improvements in perceptual, physical and mental response speeds and efficiencies.



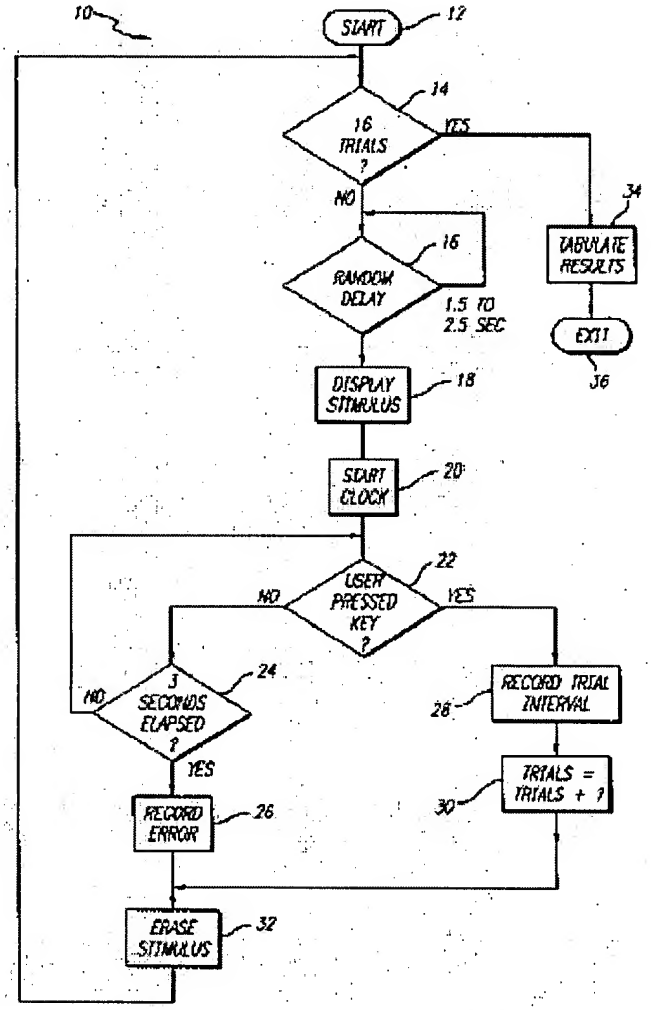
Interactive computer program for measuring and analyzing mental ability

Publication number: US6435878
Publication date: 2002-08-20
Inventor: REYNOLDS JOSH (US); KNIGHT JEREMY (US)
Applicant: BCI LLC (US)
Classification:
- international: ***G09B5/06; G09B7/04;*** *A61B5/16;* **G09B5/00; G09B7/00;** A61B5/16; (IPC1-7): G09B19/00
- European: G09B5/06C; G09B7/04
Application number: US19990286528 19990405
Priority number(s): US19990286528 19990405; US19970806500 19970227

Report a data error here

Abstract of **US6435878**

An interactive automatic system and technique for measuring and training of mental ability. In the illustrative embodiment, the invention is implemented on a computer which automatically presents a variety of visual and auditory stimuli. The system then measures reaction to the stimuli, adjusts certain stimulus parameters, and provides scores in response thereto. The scores are tabulated and displayed for analysis. In particular embodiments, the invention tests for physical reaction time, perceptual awareness thresholds, attention level, speed, efficiency and capacity of information processing by the brain and elementary cognitive processes, including memory, memory access and decision-making speed. The invention measures, identifies and quantifies noise in the subject's brain and elementary cognitive processing system, and the information exchange rate between the subject's left and right brain hemispheres. The inventive system compiles a history of the test scores, renders an overall performance rating, and delivers comments based on the subject scores. The complexity of the tests are adjusted based on the scores to optimally challenge cognitive capacities, thereby rendering more accurate evaluations of cognitive capacity, and optimizing learning of desired improvements in perceptual, physical and mental response speeds and efficiencies.



File 350:Derwent WPIX 1963-2007/UD=200725
(c) 2007 The Thomson Corporation

Set	Items	Description
S1	**2**	**AUDITORY(S)LEARNING(S)DIAGNOS?(S)COMPUTER [1 duplicate; 1 not relevant]**
S2	**1**	**AUDITORY(5W)DISCRIMINATION(5W)MEMORY [a duplicate]**
S3	24	AUDITORY(S)DIAGNOS?(S)COMPUTER
S4	**22**	**S3 NOT S1:S2**

4/5,K/11
DIALOG(R)File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.
0013297492 - Drawing available
WPI ACC NO: 2003-384397/200337
XRPX Acc No: N2003-307061
Mobile auditory ability diagnosing system connects mobile unit possessed by patient, to auditory ability inspecting instrument in hospital, through telephone network and internet
Patent Assignee: DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO (DOKU-N)
Inventor: NAKAMURA N
Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
JP 2002191581	A	20020709	JP 2000397009	A	20001227	200337	B
JP 3527946	B2	20040517	JP 2000397009	A	20001227	200433	E

Priority Applications (no., kind, date): JP 2000397009 A 20001227
Alerting Abstract JP A
NOVELTY - A mobile unit such as a mobile telephone (1) or a personal **computer** (3), is connected to an auditory ability inspecting instrument in the hospital, through a portable telephone network and internet, to enable the person to receive the auditory ability inspection through the mobile unit.
USE - For **diagnosing** the **auditory** ability of person, through use of mobile unit such as mobile telephone or personal **computer** .
ADVANTAGE - **Diagnosis** of **auditory** ability is performed without the patient having to go to the hospital.
DESCRIPTION OF DRAWINGS - The figure shows a schematic view of the mobile **auditory** ability **diagnosing** system. (Drawing includes non-English language text).
1 mobile telephone
3 personal **computer**

4/5,K/13
DIALOG(R)File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.
0012738228 - Drawing available
WPI ACC NO: 2002-590886/200263
XRPX Acc No: N2002-468804
Performing hearing evaluation test over computer network by interactively relaying information between patient located at local site and clinician located at test administration site so that clinician can evaluate patient's response
Patent Assignee: BALCH D C (BALC-I); BLANAROVICH A (BLAN-I); GIVENS G D (GIVE-I); KELLER P (KELL-I); MURPHY T (MURP-I); UNIV EAST CAROLINA (UYEC-N)
Inventor: BALCH D C; BLANAROVICH A; BLANAROVICH A M; GIVENS G D; KELLER P;

MURPHY T
Patent Family (5 patents, 98 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2002062221	A1	20020815	WO 2002US5049	A	20020205	200263	B
US 20020165466	A1	20021107	US 2001266988	P	20010207	200275	E
			US 2001295640	P	20010604		
			US 200268016	A	20020205		
AU 2002248469	A1	20020819	AU 2002248469	A	20020205	200427	E
US 6916291	B2	20050712	US 2001266988	P	20010207	200546	E
			US 2001295640	P	20010604		
			US 200268016	A	20020205		
US 20050192515	A1	20050901	US 2001266988	P	20010207	200558	E
			US 2001295640	P	20010604		
			US 200268016	A	20020205		
			US 2005113560	A	20050425		

Priority Applications (no., kind, date): US 2005113560 A 20050425; US 200268016 A 20020205; US 2001266988 P 20010207; US 2001295640 P 20010604

Alerting Abstract WO A1

NOVELTY - Hearing assessment signals are generated at a local patient site in response to a transmitting step. An information is interactively relayed between the patient located at the local site and a clinician located at the test administration site during the administering step so that the clinician can evaluate the patient's response to the hearing assessment signals. The test administration site is located remotely from the local site.

DESCRIPTION - INDEPENDENT CLAIMS are included for:

1. a method for delivering a diagnostic hearing test over a global **computer** network from a test administration site to a patient site
2. a method of controlling a diagnostic hearing test
3. a hearing evaluation device for generating hearing assessment signals at a local patient site
4. a method of controlling an electrophysiological **auditory** evaluation test using one or more of otoacoustic emissions and tympanometry
5. a hearing evaluation device

USE - For patients with a hearing deficiency for early identification of hearing loss and appropriate intervention that may be critical to preventing or ameliorating further hearing loss or language delay or disorder, particularly important in children who are, typically, more receptive to rehabilitation.

ADVANTAGE - Performs diagnostic hearing tests, which use a **computer** network to allow interaction between a test **administration** site and one or more **remote** patient sites. The test can be administered by an audiologist or clinician at a site remote from the patient, in a manner, which can allow interaction between the user and the clinician during at least a portion of the administration of the test. Meets standardized guidelines such as ANSI requirements or regulatory or certification standards.

DESCRIPTION OF DRAWINGS - The drawing is a flowchart of operations for a hearing evaluation according to an embodiment of the present invention.

4/5,K/22
DIALOG(R)File 350:Derwent WPIX

0005158341 - Drawing available

WPI ACC NO: 1990-148135/199020
XRPX Acc No: N1990-114808
Interactive medical diagnosis stimulus response tester - evaluates patient's vision and hearing using host computer, stimulus generator and response recorder with test routines and analysis
Patent Assignee: TANSLEY B W (TANS-I)
Inventor: TANSLEY B W
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
CA 1267976	A	19900417	CA 521869	A	19861030	199020 B

Priority Applications (no., kind, date): CA 521869 A 19861030

Alerting Abstract CA A

A host controller/processor (4) is pref. a microprocessor. A test operator control station (6) includes a display (8) and a keyboard (10) and a patient station (12), which also includes a display (14). A keyboard (9) is used for entering responses and for displaying test stimuli and instructions to a patient. A printer (19) is connected to the host controller/processor for providing a hard copy of a report as required.

The stimulation subcomponent (22) provides an interface between the devices of the patient station (12) and the host controller/processor. A memory (54) is connected to the host **computer** , the storage including test files (70), (72), (74), (76) and (78). The real-time generation component (24) provides an interface between the image stage (26) and the stimulation subcomponent (22). The behaviourial response monitoring component (28) provides an interface between the hand response component. Voice and eye response component (30,32,34) and the host controller/processor.

USE - **Visual**, **auditory** , cognitive and attentional performance analysis for medical **diagnosis** , confirmation of psychophysical findings, monitoring during surgery and therapy, drug treatment.

[File 350] **Derwent WPIX** 1963-2007/UD=200725

[File 347] **JAPIO** Dec 1976-2006/Dec(Updated 070403)

Set	Items	Description
S1	8	S AUDITORY()DISCRIMINATION
S2	8	S AUDITORY()MEMORY
S3	82	S AUDITORY()(PROCESSING OR PERCEPTION)
S4	427	S LEARNING()(DISORDER? ? OR DISABILIT? OR DISABL??)
S5	990557	S COMPUTER OR COMPUTERS OR COMPUTERI?ED
S6	546245	S ONLINE OR NETWORK??
S7	229589	S DIAGNOS? OR ASSESS?
S8	1269237	S DETERMIN?
S9	477528	S IDENTIFY??? OR IDENTIFIE? ? OR IDENTIFICATION
S10	447572	S ANALYS? OR ANALYZ?
S11	**1**	**S S1 AND S2 [a duplicate]**
S12	4	S S1:S3 AND S4
S13	**3**	**S S12 NOT S11 [too recent]**
S14	41	S AUDITORY AND S4
S15	5	S S14 AND S5:S6
S16	5	S S15 NOT S11:S12
S17	**3**	**S S16 AND S7:S10**
S18	**2**	**S S16 NOT S17 [not relevant]**
S19	**14**	**S S1:S2 NOT (S11:S12 OR S15)**

17/5,K/2 (Item 2 from file: 350)
Derwent WPIX

0010576663 *Drawing available*
WPI Acc no: 2001-181175/200118
Related WPI Acc No: 2005-401861
XRPX Acc No: N2001-129115
Interactive sound awareness skill improvement system for speech and language development, adds audible background noise to sound from phonological and auditory tests, to obscure sound and change test's difficulty
Patent Assignee: COGNITIVE CONCEPTS INC (COGN-N)
Inventor: WASOWICZ J
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6146147	A	20001114	US 199839194	A	19980313	200118	B

Priority Applications (no., kind, date): US 199839194 A 19980313
Alerting Abstract US A
NOVELTY - A phonological game logic (14) and an **auditory** game logic (12) run on microprocessor (10), respectively provide audible sound through speaker (24), and phonological and **auditory tests** of sound to which user must respond, graphically displayed on display (16). Acoustic enhancement logic (26) adds audible background noise to sound output by one of the **tests**, to obscure sound and change difficulty of test.
DESCRIPTION - A keyboard (18) or a mouse (20) is connected to the microprocessor, for the user to **identify** the correct response to the phonological and **auditory** tests. An INDEPENDENT CLAIM is also included for interactive sound awareness skills improvement system.
USE - For improving interactive sound awareness skills using multimedia games for speech, language and academic skills development using Internet, wired and wireless **network** systems. Also used as learning tool for children and adults with speech, cognitive, attention or processing defects, dyslexia and language based **learning disabilities**, hearing impairment, and chronic ear infections.

ADVANTAGE - Provides an interactive and rewarding multi-media format which can be used to exercise skills of user to make him/her a better listener and more aware of sounds of language. Since skills improvement system is provided in a game format with cartoon graphics and lively music, the learning is made fun to the user. With the multi-level game format and systematic control of important learning variables, the player receives extensive practice to develop, build and strengthen **auditory** and phonological skills.
DESCRIPTION OF DRAWINGS - The figure shows schematic representation of interactive sound awareness skills improvement system.
10 Microprocessor
12 **Auditory** game logic
14 Phonological game logic
16 Display
18 Keyboard
20 Mouse(24) Speaker
26 Acoustic enhancement logic
Original Abstracts:
An interactive phonological and **auditory** skills improvement system is provided. The system includes a microprocessor, a display connected to the... ...the phonological test which is graphically displayed on the display screen using an input device. **Auditory** game logic is also run on the microprocessor. The **auditory** game logic provides at least one audible sound through the speaker and an **auditory** test regarding said at least one sound. The user must respond to the **auditory** test using the input device. The **auditory** test is also graphically displayed on the display screen.
...
Claims:
An interactive sound awareness skill training system being executed on a **computer** system having **a** microprocessor, a speaker and an input device interconnected together, the system comprising:one or more...

17/5,K/3 (Item 3 from file: 350)
Derwent WPIX

0002470193
WPI Acc no: 1982-C8468E/198211
Recognition and correction of spelling difficulties - using computer program analysing and substituting texts and lists
Patent Assignee: BOSSART M (BOSS-I)
Patent Family (3 patents, 21 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
BE 891010	A	19820301	BE 891829	A	19820119	198211	B
WO 1982001613	A	19820513	WO 1981US1486	A	19811103	198220	E
EP 64549	A	19821117	EP 1981900058	A	19811103	198247	E

Priority Applications (no., kind, date): US 1980203552 A 19801105
Alerting Abstract BE A
The method is for spotting and correcting spelling deficiencies in a student. It involves **analysing** the text written by the subject with the learning problem to derive statistical data concerning the vocabulary and spelling. It can be useful in the **diagnosis** of dyslexia etc. A first set of text, a second set of words and a third set of basic words are fed into a **computer**. The **analysis** involves making substitutions for wrongly spelt words.
The total number of types of words are added up excluding any repeats and then the ratio of the total number of types and the total number of words in the text similar to a word in the second or in the third list calculated. Subsequent tests are carried out and the ratio monitored.

Original Abstracts:
A method for diagnosing learning disabilities such as dyslexia, and other visual, auditory or perceptual defects which are manifested by misspelling and vocabulary deficiencies; and means for palliating such... ... A method for **diagnosing learning disabilities such as dyslexia**, and other visual, **auditory** or perceptual **defects** which are manifested by misspelling and vocabulary deficiencies; and means for palliating such disabilities comprising...

19/5,K/6 (Item 6 from file: 350)
Derwent WPIX

0011175126 *Drawing available*
WPI Acc no: 2002-112903/200215
XRPX Acc No: N2002-084041
Memory power improvement method using quantitative EEG technique involves correlating QEEG data of patient during problem solving session, with memory performance to indicate data with positive correlations
Patent Assignee: THORNTON K E (THOR-I)
Inventor: THORNTON K E
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6309361	B1	20011030	US 199884094	P	19980504	200215	B
			US 1999302321	A	19990429		

Priority Applications (no., kind, date): US 199884094 P 19980504; US 1999302321 A 19990429
Alerting Abstract US B1
NOVELTY - The quantitative electroencephalographic (QEEG) brain functions of a patient measured by attaching electrodes on the head during problem solving session, are recorded and converted into ASCII file. The QEEG data with positive correlations for different tasks are statistically **analyzed**, correlated with memory performance and communicated back to the patient in verbal form by coaching the patient.
USE - For memory power improvement using quantitative electroencephalography (QEEG) technique.
ADVANTAGE - The memory of a patient is improved efficiently, by communicating QEEG data with positive correlations to the patient.
DESCRIPTION OF DRAWINGS - The figure shows the chart indicating the data in QEEG technique.
Original Abstracts:
...response patterns across the tasks for the two groups. The relationship between cognitive success of **auditory memory** ability (paragraphs, word lists) was examined for the eyes closed and auditor, attention condition. The...

19/5,K/9 (Item 9 from file: 350)
Derwent WPIX

0006726164 *Drawing available*
WPI Acc no: 1994-108198/199413
XRPX Acc No: N1994-084444
Method of evaluating change in auditory memory - determining auditory threshold of letter recognition before and immediately after visual presentation of one of the letters
Patent Assignee: TADZ EPIDEMIOLOGY & HYGIENE RES INST (TEPI-R)
Inventor: MESHCHERYAKOV V R
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application	Kind	Date	Update	Type

			Number				
SU 1792646	A1	19930207	SU 4853830	A	19900726	199413	B

Priority Applications (no., kind, date): SU 4853830 A 19900726
Alerting Abstract SU A1
The **auditory** threshold of recognition of letters is **determined** before and immediately after visual presentation of one of these letters. The difference between the values obtained is calculated and the change in unconscious **auditory memory** is evaluated by the dynamics of the value obtained.
USE/ADVANTAGE - To evaluate change in **auditory memory**, reducing the time taken to investigate unconscious memory. Bul.5/7.2.93.

19/5,K/11 (Item 11 from file: 350)
Derwent WPIX

0004880852
WPI Acc no: 1989-262427/198936
XRPX Acc No: N1989-200108
Evaluating change in auditory memory vol. during work - determining volume of short-term auditory memory before and after load
Patent Assignee: DON WORK HYGIENE (DONE-R)
Inventor: KUDINOVA T V; MAKSIMOVIC V A; TKACHENKO L N
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
SU 1445685	A	19881223	SU 3285402	A	19810121	198936	B

Priority Applications (no., kind, date): SU 3285402 A 19810121
Alerting Abstract SU A
In the method of evaluating change in the volume of **auditory memory** during work, the volume of short-term **auditory memory** is **determined** before and 24 hours after test load and cutaneo-galvanic reaction is **determined** during presentation of test load, consisting of remembering 10 words not connected in meaning five times.
ADVANTAGE - Method of evaluating change in the volume of **auditory memory** during the process of professional activity is more accurate. Bul.47/23.12.88.

19/5,K/14 (Item 14 from file: 350)
Derwent WPIX

0001382685
WPI Acc no: 1977-E2087Y/197720
Hearing and psychological testing appts. - uses tone generator controlled by signal code from memory to determine auditory memory and hearing side dominance
Patent Assignee: KRASS A (KRAS-I)
Inventor: KRASS A
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 4022975	A	19770510	US 1976666781	A	19760315	197720	B
			US 1976666781	A	19760315		

Priority Applications (no., kind, date): US 1976666781 A 19760315
Alerting Abstract US A
The appts. is used for testing each ear of a human subject separately for extent of hearing and frequency detection. In addition it permits the delivery, preferably by electronic means for pre-set arrangement, of a series of intermittent long and short signals in different combinations, by means of which the subject can be tested for **auditory memory** and hearing side dominance.

The device may be used to **determine** whether one ear is more functional than the other in the hearing process, especially whether other mental functions depending on the **auditory** sense are dependent more on one ear than the other.

Original Abstracts:

...short signals in different combinations, by means of which the subject can be tested for **auditory memory** and hearing side dominance.

File 350:Derwent WPIX 1963-2007/UD=200725
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Set Items Description
S1 4 (APD OR CAPD)(S)AUDITORY NOT (AUDITORY()PROCESSING OR (AUDITORY()MEMORY AND AUDITORY()DISCRIMINATION)) [not relevant]

File 349:PCT FULLTEXT 1979-2007/UB=20070419UT=20070312
(c) 2007 WIPO/Thomson
File 348:EUROPEAN PATENTS 1978-2007/ 200716
(c) 2007 EUROPEAN PATENT OFFICE
Set Items Description
S1 1 (APD OR CAPD)(S)AUDITORY NOT (AUDITORY()PROCESSING OR (AUDITORY()MEMORY AND AUDITORY()DISCRIMINATION)) [not relevant]
S2 21 AUDITORY()DISCRIMINATION
S3 18 AUDITORY()MEMORY
S4 396 AUDITORY()(PROCESSING OR PERCEPTION)
S5 1702 LEARNING()(DISORDER? ? OR DISABILIT? OR DISABL??)
S6 450004 COMPUTER OR COMPUTERS OR COMPUTERI?ED
S7 344268 ONLINE OR NETWORK??
S8 272729 DIAGNOS? OR ASSESS?
S9 1181159 DETERMIN?
S10 579610 IDENTIFY??? OR IDENTIFIE? ? OR IDENTIFICATION
S11 556656 ANALYS? OR ANALYZ?
S12 212181 VISUAL??
S13 12 (S2(S)S3 OR S4)(S)S5
S14 12 S6:S7 AND S13
S15 11 S14(S)S9:S11
S16 9 S12 AND S15
S17 2 S15 NOT S16 [not relevant]
S18 1 S14 NOT S15 [not relevant]
S19 0 S2(S)S3
S20 396 S4 NOT S1
S21 12 S4(S)S5
S22 0 S21 NOT S13

16/3,AB,K/5 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2007 WIPO/Thomson. All rts. reserv.
00557682
PHONOLOGICAL AWARENESS, PHONOLOGICAL PROCESSING, AND READING SKILL TRAINING SYSTEM AND METHOD
SENSIBILISATION PHONOLOGIQUE, TRAITEMENT PHONOLOGIQUE ET SYSTEME ET PROCEDE D'APPRENTISSAGE DE LA LECTURE
Patent Applicant/Assignee:
COGNITIVE CONCEPTS INC, Suite 300, 990 Grove Street, Evanston, IL 60201, US, US (Residence), US (Nationality)
Inventor(s):
WASOWICZ Janet M, 207 Hamilton Street, Evanston, IL 60202, US,
Legal Representative:
LOHSE Timothy W (agent), Gray Cary Ware & Freidenrich LLP, Attn: Patent Dept., 400 Hamilton Avenue, Palo Alto, CA 94301-1825, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200021055 A1 20000413 (WO 0021055)
Application: WO 99US23518 19991007 (PCT/WO US9923518)
Priority Application: US 98103354 19981007; US 99414393 19991006
Designated States:
(Protection type is "patent" unless otherwise stated - for applications

prior to 2004)
AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 19528
English Abstract
A training tool for training and **assessing one or more auditory processing, phonological awareness, phonological processing and reading skills of an individual is provided**. The training tool may use various graphical games (102) to train the individual's ability in a particular set of auditory processing, phonological awareness, phonological processing and reading skills. The system may use speech recognition technology to permit the user to interact with the games.
Fulltext Availability:
Detailed Description
Detailed Description
... better able to learn to read and spell. In addition, phonological processing deficits have been **identified** by researchers as the most probable cause of reading related **learning disabilities** . Due to this link, many states have started to mandate phonological awareness training as part...
...The problem is that it is difficult for untrained teachers to train a user's **auditory processing** , phonological awareness, processing and reading skills. Thus, it is desirable to provide an **auditory processing** and phonological awareness skill training system and method that overcomes the above problems and limitations...of sounds.
Detailed Description of a Preferred Embodiment
The invention is particularly...database II 2 permits the user's progress at each skill to be monitored and **analyzed** . The game administrator and scorer module 1 14 controls which game is being played, the...
...also permits one or more different users to user the training tool on the same **computer** and keep track of each user separately. The administrator 1 14 may also include statistical...a different difficulty variable (as described below). In step 182, the training module may display **visual** representations of a series of sounds/words or digits 184 as shown in Figure 13...
...with a time interval between each sound. In step 186, the user is prompted to **identify** the graphical representations of the sounds/words/digits generated by the **computer** in sequence. In step 188, the module **analyzes** the user's response to **determine** , for example, the correctness of the user's response and performance of the user based as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 13, a shield 192 may indicate a correct response while a...
...short vowels which are in turn easier to distinguish than consonants), the timing of the **visual** cueing (e.g., the **visual** cueing may occur at the time that the sound is generated or it may be delayed by some period of time making it hard to rely on the **visual** cue for help), the level of background noise (e.g., it is harder to distinguish...
...240, the module may provide the user with feedback 242 (shown in Figure 19 as **visual** feedback of a paint tube, but it may also be auditory

feedback) about the user's responses. In the example of the **visual** feedback shown ...270, the module may provide the user with feedback 242 (shown in Figure 19 as **visual** feedback of a paint tube, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 19, an empty paint tube may represent an incorrect answer and...300, the module may provide the user with feedback 242 (shown in Figure 19 as **visual** feedback of a paint tube, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 19, an empty paint tube may represent an incorrect answer and...

...330, the module may provide the user with feedback 242 (shown in Figure 19 as **visual** feedback of a paint tube, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 19, an empty paint tube may represent an incorrect answer and...game user interface 350 in accordance with the invention. The user interface may include the **visual** feedback 242 as described above, a pause button 352 to pause the game, a speaker...

...390, the module may provide the user with feedback 392 (shown in Figure 23 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 23, a gem 394 may indicate a correct answer and a...420, the module may provide the user with feedback 392 (shown in Figure 23 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 23, a gem 394 may indicate a correct answer and a...470, the module may provide the user with feedback 472 (shown in Figure 29 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 29, a hippo score 474 may indicate a correct answer and...500, the module may provide the user with feedback 472 (shown in Figure 29 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 29, a hippo score 474 may indicate a correct answer and...

...530, the module may provide the user with feedback 472 (shown in Figure 29 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 29, a hippo score 474 may indicate a correct answer and...560, the module may provide the user with feedback 472 (shown in Figure 29 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 29, a hippo score 474 may indicate a correct answer and...

...29 is a diagram illustrating an example of the user interface 580 of the sound **identification** training game in accordance with the invention. In addition to the feedback 472, the user...

...also include a picture of a hippo (the user) shooting baskets against a rhino (the **computer**). In playing the game, the user may listen to a target sound (e.g., "e...

...3OF are diagrams illustrating examples of different views of the sub-tasks of the sound **identification** training game of Figure 29. Each sub-task may use the same basic user interface...

...a word and Figure 3OF illustrates a sub-task 592 for training a user's **identification** of the position of a consonant sound in a word.

In summary, the sounds change **identification** module may include 155 levels that use natural and **computer** -generated speech to train users to discriminate vowels and consonant sounds. The user may also be trained to recognize sounds and to **identify** positions of sounds in words. In addition, sound-symbol correspondence for vowels, vowel digraphs,

diphthongs...610, the module may provide the user with feedback 612 (shown in Figure 35 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 35, a lightbulb 613 may illuminate to indicate a correct answer...

...640, the module may provide the user with feedback 612 (shown in Figure 35 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 35, a light bulb 613 may illuminate to indicate a correct...670, the module may provide the user with feedback 612 (shown in Figure 35 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 35, a lightbulb 613 may illuminate to indicate a correct answer...

...700, the module may provide the user with feedback 612 (shown in Figure 35 as **visual** feedback, but it may also be auditory feedback) about the user's responses. In the example of the **visual** feedback shown in Figure 35, a lightbulb 613 may illuminate to indicate a correct answer...

[File 350] **Derwent WPIX** 1963-2006/UD=200724

[File 347] **JAPIO** Dec 1976-2006/Dec(Updated 070403)

Set	Items	Description
S1	177	S AU=(DIETRICH D? OR DIETRICH, D?)
S2	199	S LEARNING()DISAB?
S3	**2**	**S S1 AND S2**

3/5/1 (Item 1 from file: 350)
Derwent WPIX

0014443156 *Drawing available*
WPI Acc no: 2004-633822/200461
Related WPI Acc No: 2003-585497
XRPX Acc No: N2004-500994
Learning disabilities diagnostic system for children, has diagnostic station that uses evaluation of tests from visual and auditory assessment components to provide assessment of potential learning disabilities of test subject
Patent Assignee: DIETRICH D (DIET-I)
Inventor: **DIETRICH D**
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20040158171	A1	20040812	US 2001837287	A	20010418	200461	B
			US 2003750299	A	20031231		

Priority Applications (no., kind, date): US 2001837287 A 20010418; US 2003750299 A 20031231
Alerting Abstract US A1
NOVELTY - The system has a diagnostic section (16) coupled by a communication interface to a remote station with visual and auditory assessment components (17, 18). The diagnostic station uses evaluation of tests from the components to provide an assessment of potential **learning disabilities** of a test subject. The diagnostic station has a computer for automatically evaluating test responses/medical specialist`s review of test responses.
DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of diagnosing **learning disabilities**.
USE - Used for diagnosing the **learning disabilities** of children between the ages five and twelve.
ADVANTAGE - The system provides a low-cost, prescreening assessment for identifying possible **learning disabilities** (LD) in children between the ages of five and twelve. The system allows pre-screening of **learning disabilities** to be carried out by the child with parental assistance in the convenience and privacy of home, such that the children do not feel uncomfortable as they would if the tests are carried out in the medical surroundings.
DESCRIPTION OF DRAWINGS - The drawing shows a schematic diagram of a **learning disabilities** diagnosing system.
12 Remote station
14 Communication interface
16 Diagnostic station
17 Visual assessment component
18 Auditory assessment component
Class Codes
International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date

A61B-005/00			Main		"Version 7"

US Classification, Issued: 600558000, 600301000, 600559000, 128920000, 128904000, 434178000
DWPI Class: S05; T01; P31
Manual Codes (EPI/S-X): S05-D06; T01-J06A; T01-J18; T01-N01D

3/5/2 (Item 2 from file: 350)
Derwent WPIX

0013493173 *Drawing available*
WPI Acc no: 2003-585497/200355
Related WPI Acc No: 2004-633822
XRPX Acc No: N2003-466109
Learning disabilities diagnostic system, has diagnostic station receiving information from visual component and other information from auditory component to prepare assessment based on received information
Patent Assignee: DIETRICH D (DIET-I)
Inventor: **DIETRICH D**
Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030088159	A1	20030508	US 2001837287	A	20010418	200355	B
US 6730041	B2	20040504	US 2001837287	A	20010418	200430	E

Priority Applications (no., kind, date): US 2001837287 A 20010418
Alerting Abstract US A1
NOVELTY - The system has a remote station (12) with a visual (17) and auditory (18) assessment components. A diagnostic station is coupled by a communication interface (14) to the remote station. The diagnostic station (16) receives information from the visual component and other information from the auditory component. The diagnostic station prepares an assessment based on the received information.
DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for diagnosing **learning disabilities**.
USE - Used for prescreening of **learning disabilities**.
ADVANTAGE - The system allows a user to complete visual assessment tests and auditory assessment tests in their own environment for effective prescreening of **learning disabilities**.
DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of the **learning disabilities** diagnostic system.
12 Remote station
14 Communication interface
16 Diagnostic station
17 Visual assessment component
18 Auditory assessment component
Class Codes
International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
A61B-005/00			Main		"Version 7"

US Classification, Issued: 600300000, 600558000, 600301000, 600559000, 128920000, 128904000, 434178000
DWPI Class: S05; T01; P31
Manual Codes (EPI/S-X): S05-D06; T01-J06A; T01-J10B2; T01-J18; T01-J30A ; T01-N03A

[File 155] **MEDLINE(R)** 1950-2007/Apr 11

[File 5] **Biosis Previews(R)** 1926-2007/Apr W1

[File 73] **EMBASE** 1974-2007/Apr 11

[File 2] **INSPEC** 1898-2007/Apr W1

[File 1] **ERIC** 1965-2007/Mar

[File 121] **Brit.Education Index** 1976-2007/Q3

[File 437] **Education Abstracts** 1983-2007/Mar

[File 65] **Inside Conferences** 1993-2007/Apr 13

[File 35] **Dissertation Abs Online** 1861-2007/Mar

Set	Items	Description
S1	1201	S AU=(DIETRICH D? OR DIETRICH, D?)
S2	42397	S LEARNING()DISAB?
S3	4	S S1 AND S2
S4	**4**	**RD (unique items)**

4/9/1 (Item 1 from file: 155)
Fulltext available through: USPTO Full Text Retrieval Options
MEDLINE(R)

03440613 **PMID:** 4686722
Significance of WISC verbal-performance discrepancies for younger children with learning disabilities.
Rourke B P; **Dietrich D M**; Young G C
Perceptual and motor skills (UNITED STATES) Feb 1973 , 36 (1) p275-82 , **ISSN:** 0031-5125--Print **Journal Code:** 0401131
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
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Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS
Tags: Male
Descriptors: *Intelligence Tests; *Learning Disorders--diagnosis--DI; *Verbal Behavior ; Adolescent; Age Factors; Auditory Perception; Brain Damage, Chronic --complications--CO; Child; Child Development; Child, Preschool; Humans; Learning Disorders--classification--CL; Motor Skills; Problem Solving; Psychological Tests; Psychometrics; Visual Perception
Record Date Created: 19730405
Record Date Completed: 19730405